

ABSTRACT OF THE DISCLOSURE

A three-dimensional force and torque converter unit for measuring an external force or torque applied to the unit and converting it into a signal, whereby the signal may be used to control a system or device incorporating the converter unit. The converter unit includes a controller formed with four spaced apart arms having six or more degrees of constraint. A force or torque may be applied to the tip portions of each of the arms via a gripping means. Sensors are used to measure the deflection of the arms under an applied loading or torque and an output signal is generated.